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10/822,872	04/13/2004	Yu Wang	839-1562	2665
36/024 7590 03/06/2008 NIXON & VANDERHYE P.C. 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
FLETCHER III, WILLIAM P				
ART UNIT		PAPER NUMBER		
1792				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/822,872

**Applicant(s)**

WANG ET AL.

**Examiner**

William P. Fletcher III

**Art Unit**

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-854)  
Paper No(s)/Mail Date 7/1/2004 and 9/17/2004  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action concerns claims 1-21 as filed April 13, 2004.

#### ***Information Disclosure Statement***

2. The information disclosure statements filed July 1, 2004, and September 17, 2004, have been considered by the Examiner.

#### ***Drawings***

3. The drawings were received on April 13, 2004. These drawings are acceptable.

#### ***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: METHOD OF COATING STATOR BAR AND STATOR BAR END FITTING.

#### ***Claim Objections***

5. Claims 8 and 16 are objected to because of the following informalities: "hydrphobic" should, apparently, read "hydrophobic." Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 11 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

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A. The term "elevated" in claims 11 and 19 is a relative term which renders the claim indefinite. The term "elevated" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear how high the temperature must be/may be in order to be considered "elevated" within the context of the invention.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. **Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,605,590 A in view of, for example, US 3,410,250 A.**

A. Claim 1:

- i. US '590, cited in Applicant's IDS, teaches all of the limitations of this claim but does not expressly recite that the epoxy resin is spray applied from a spray head nozzle inserted into the an opening of the fitting. See, for example, the abstract, Fig. 3, and 2:15-25.
  - ii. The Examiner notes that the syringe taught in this reference is merely exemplary and the method is in not limited thereto. Consequently, it is clear that any suitable means for applying the epoxy resin may advantageously be used.
  - iii. It is the Examiner's position that spray head nozzles are well known in the art to be inserted into hollow articles to be coated with epoxy for application of the epoxy to the inner surfaces of the articles. US '250 is cited as merely one example of such an arrangement.
  - iv. It is the Examiner's position that it would have been obvious to one skilled in the art to modify the process of US '590 so as to utilize, instead of the syringe, a spray nozzle for application of the epoxy as such is known in the art as a suitable expedient for doing so.
- B. Claims 2-4, 12, 20, and 21: The claimed thicknesses and coverage are not expressly taught. It is the Examiner's position that the thickness and coverage of the epoxy material is a result-effective variable. The thickness and coverage must be sufficient to impart the desired protection, but not so great as to impair the functioning of the stator or to be unduly wasteful of materials.

Consequently, it would have been obvious to one skilled in the art to optimize these result-effective variables by routine experimentation. See MPEP 2144.05.

C. Claims 5, 6, 13, and 14: The limitations of these claims are not expressly taught. It is the Examiner's position that either open or closed hollow strands would have been obvious to one skilled in the art, depending on the directionality of the spray. A more directed spray would avoid unwanted coating of the hollow strands, but require more technical sophistication. A less directed spray, requiring blocking of the hollow strands, requires less technical sophistication. Both would have been well within the level of skill of one skilled in the art and would have been obvious expedients for achieving the same result.

D. Claims 7 and 15: US '590 teaches brazing at, for example, 4:10 ff.

E. Claims 8 and 16: While US '590 does not expressly recite hydrophobic epoxy, it is the Examiner's position that such is either inherent or would have been obvious to one skilled in the art. US '590 is directed to preventing leakage of cooling water. If the particular epoxy resins recited in this reference are not hydrophobic, it is the Examiner's position that selection of a hydrophobic resin would have been obvious since water repellency would advantageously enhance water leakage protection.

F. Claims 9 and 17: The limitations of this claim read on cleaning and drying the metal prior to coating, which is well known in the art and would have been readily obvious to one of ordinary skill in order to provide a

contaminant-free surface and promote adhesion of the epoxy. This claim is also open to said cleaning and drying being performed on the stator and the fitting *before* they are assembled.

G. Claims 10 and 18: US '590 does not expressly teach curing at room temperature, but does not preclude the use of any particular epoxy. It is the Examiner's position that room temperature curing epoxies are known and one skilled in the art would have been motivated to utilize such a resin by the desire and expectation of a similar result.

H. Claims 11 and 19: US '590 teaches curing by heating. See 5:30-32.

### ***Double Patenting***

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**12. Claims 1-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-8 and 11-13 of U.S. Patent No. 7,150,091.**

A. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims fully encompass the patented claims with the exception that the patented claims do not expressly recite that the spray nozzle is inserted into the cavity.

B. It would have been obvious to one of ordinary skill in the art to insert the spray nozzle so as to minimize overspray and obtain greater spraying accuracy through greater proximity.

### ***Conclusion***

13. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571)



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272-1419. The examiner can normally be reached on Sunday, 5:00 AM - 12:00 PM and Monday through Friday, 5:00 AM - 3:30 PM; on campus every Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/William Phillip Fletcher III/**

Primary Examiner

February 26, 2008